

**REMARKS**

By this amendment, claims 1-22 are pending. No claim is amended.

The Office Action mailed December 17, 2003 rejected claims 1-18 under 35 U.S.C. § 102 as anticipated by *Arsenault* (US 5,408,650), claims 19-22 as obvious under 35 U.S.C. § 103 based on *Arsenault* in view of *Elliott et al.* (US 4,945,474).

**A. CLAIMS 5, 9, 14, AND 18 ARE NOT ANTICIPATED BECAUSE  
ARSENAULT FAILS TO DISCLOSE “MIGRATED OBJECTS.”**

To anticipate a patent claim, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim. *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383, 58 USPQ2d 1286, 1291 (Fed. Cir. 2001); *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991).

The rejection of claims 5, 9, 14, and 18 over *Arsenault* is improper because the applied reference does not disclose the limitations of the claims. For example, claims 5, 9, 14, and 18 recite:

5. (Previously Presented) The method according to claim 1, wherein:  
the tags indicate respective addresses of allocated objects; and  
the one or more marked tags indicate one or more respective addresses  
of migrated objects.

9. (Previously Presented) The method according to claim 6, wherein:  
the tags indicate respective addresses of allocated objects; and  
the one or more marked tags indicate one or more respective addresses  
of migrated objects.

Claims 14 and 18 are computer-readable medium claims corresponding to claims 5 and 9, respectively. These elements are not disclosed in *Arsenault*.

*Arsenault* does not have any disclosure of “migrated objects” as recited in claims 5, 9, 14, and 18. The Examiner’s response on page 10 of the Office Action states that “deallocation

routine indicates migrated objects; that is, objects that have been deallocated are migrated objects.” However, “migrated” and “deallocated” are clearly different: “migrated” means “moved,” but “deallocated” means “stopped existing.”

Moreover, claims 5, 9, 14, and 18 recite that the “the one or more **marked tags indicate** one or more respective **addresses** of migrated objects” (emphasis added). Unless the patent otherwise provides, a claim term cannot be given a different meaning in the various claims of the same patent. In the rejection of parent claim 1, the “marked tag” is read on a creation count, an ordinal number (col. 6:42), which does not indicate an address at all, let alone an address of a migrated object. The newly cited cols. 6:50–7:4 do not support the rejection, however, because it fails to discuss creation counts at all. Thus, there is no teaching of marked tags indicating “one or more respective **addresses** of migrated objects,” as recited in claims 5, 9, 14, and 18.

**B. ARSENAULT FAILS TO ANTICIPATE CLAIMS 1-18 BECAUSE ARSENAULT DISCLOSES NEITHER “LOGGING A PLURALITY OF STACK TRACES ... IN A LOG FILE” NOR “ACCESSING A LOG FILE COMPRISING A LIST OF STACK TRACES.”**

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Turning now to the rejection of all claims 1-18, this rejection is respectfully traversed because *Arsenault* does not disclose the limitations recited in independent claims 1, 6, 10, and 15. For example, independent claims 1 and 10 recite “logging a plurality of stack traces and respective tags in a log file,” and independent claims 6 and 15 recite “accessing a log file comprising a list of stack traces and respective tags.”

*Arsenault* contains no explicit disclosure of a “log file” and at best discloses a representation displayed to the user on the screen of a display device that includes “a listing **26** of the call-stack associated with a selected memory segment” (col. 6:2-4, note singular “call-stack”). Specifically, *Arsenault* discloses a graphic representation of a map of allocated memory segments depicted by segment type and various listings shown on a display device to a user (cols. 5:65–

6:4), but not the “recording within the log file one or more of the tags as one or more marked tags” as presently recited in independent claims 1 and 10 and “accessing a log file comprising a list of stack traces and respective tags.”

In response to Applicant’s arguments in the Appeal Brief, the Office Action, p. 13, resorted to inherency to fill out the disclosure missing in *Arsenault*: “Arsenault inherently teaches a log file because there is not a debugger without a log file, see column 3, lines 37-45.” However, col. 3:37-45 has nothing to do with log file, but with accessing the “ ‘symbols’ and locations of the **compiled executable version** of the program” (col. 3:40-41, emphasis added). A compiled executable version of a program is not a program, and, even if it were, debuggers do not write stack traces and other debugging output to compiled executable versions of programs.

Furthermore, the rejection does meet the standard imposed by the Federal Circuit in using inherency. Although “inherency places subject matter in the public domain as well as express disclosure,” *Schering Corp. v. Geneva Pharms., Inc.*, No. 02-1540 (Fed. Cir., August 1, 2003), slip op. at 9, it must be clear that the missing descriptive matter is necessarily present in the reference to establish inherency. *In re Roberston*, 49 USPQ2d 1949, 1951 (Fed. Cir., 1999). Under the principles of inherency, the prior art must necessarily function in accordance with, or include, the claim limitations. *MEHL/Biophile Int’l.*, 52 USPQ2d 1303 (Fed. Cir. 1999); see also *Schering Corp., id.* at 8 (“necessarily and inevitably”). As explained in *MEHL/Biophile Int’l.*:

Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.

The attempt to base the rejection on something other than what *Arsenault* teaches follows far short of these requirements for inherency. For one, there is no evidence on the record that

“there is not a debugger without a log file.” However, it is not a necessary requirement for debuggers to have log files, especially on microprocessor systems. If this statement is “well-known,” then it is traversed and the Patent Office is requested to articulate and place on the record the “common knowledge” used to negate patentability. *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001); *In re Sang Su Lee*, No. 00-1158 (Fed. Cir., Jan. 18, 2002). As another example, even if some evidence were to be shown of a debugger using a log, one must still show a debugger that logs stack traces, because debuggers do not necessarily log everything.

**C. THERE IS NO MOTIVATION TO COMBINE ARSENAULT AND ELLIOT ET AL. FOR CLAIMS 19-22.**


The obviousness rejection of claims 19-22 is respectfully traversed because there is no motivation to combine *Arsenault* and *Elliott et al.* As best understood, the Office Action attempts to read the recited “log file” on an inherent log file in debuggers. However, as explained above, this use of inherency is insufficient as a matter of law, because not all debuggers use log files and there is no reference on the record that even states that all debuggers use log files. Even if the Examiner were to find a reference explicitly disclosing this, there is still no motivation for one of ordinary skill in the art to modify debugger log files that log output with the non-analogous *Elliott et al.* because *Elliott et al.* is not directed at all to debugger log files but to processing relational database recovery logs. The formats are different, and all the special processing in *Elliott et al.* to handle I/O errors and system crashes when logging database transactions is irrelevant to *Arsenault*, which does not use database transactions.

Therefore, the present application, as amended, overcomes the objections and rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at 703-425-8516 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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